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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
PEREZ GUTIERREZ, RAFAEL	
ART UNIT	**PAPER NUMBER**
2686	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/915,091	Schmidl et al.	
	Examiner	Art Unit	
	Rafael Perez-Gutierrez	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 July 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 5-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/19/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on July 19, 2004. **Claims 1-3 and 5-32** are now pending in the present application. **This Action is made FINAL.**

Information Disclosure Statement

2. The information disclosure statement submitted on July 19, 2004 has been considered by the Examiner and made of record in the application file.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

> A person shall be entitled to a patent unless -- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 8-10, 12-16, 18-20, 22, 24-26, 29, 30, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by **Van De Berg (U.S. Patent # 5,907,812)**.

Consider **claim 1**, Van De Berg clearly shows and discloses a method of selecting a plurality of carrier frequency bands for use in a desired radio (wireless) communication from a among a plurality of carrier frequency bands available to be used for the desired radio (wireless) communication (abstract, figures 2 and 4, column 2 line 65 - column 3 line 6, and column 3 lines 38-48), comprising:

scanning (passively monitoring) the plurality of carrier frequency bands to determine interference information for each of the carrier frequency bands (abstract, figures 2, 4, and 7-9, column 2 line 65 - column 3 line 17, column 3 lines 38-48, column 4 lines 27-39, column 7 lines 48-65, and column 9 lines 4-17);

combining the interference information of said each of the carrier frequency bands to produce a signal quality indication (i.e., results of the scanning (passively monitoring) are combined to determine an interference-free (which indicates good signal quality) frequency band comprising said each of the carrier frequency bands) (figure 7 steps 2-6 and column 9 lines 4-44); and

selecting the plurality of carrier frequency bands for the desired radio (wireless) communication in response to the signal quality indication (abstract, figures 2, 4, 7-9, column 3 lines 1-6 and 11-17, column 5 lines 8-12, and column 9 lines 9-30).

Consider **claim 3**, and **as applied to claim 1 above**, Van De Berg further shows and discloses that said scanning (passive monitoring) step includes monitoring interference associated with the plurality of carrier frequency bands (abstract, figure 7 step 3, figure 8 step 13, figure 9 step 24, column 3 lines 1-6 and 11-17, column 9 lines 6-8, column 9 lines 57-62, and column 10 lines 46-50).

Consider **claim 5**, and **as applied to claim 1 above**, Van De Berg further shows and discloses that said plurality of carrier frequency bands are narrow frequency bands (e.g., C_2, C_3, C_4, C_5, and C_6) comprising a wide frequency band C^1 (figure 2, figure 7 steps 2-6, column 7 line 48 - column 8 line 6, and column 9 lines 4-30).

Consider **claim 8**, and **as applied to claim 1 above**, Van De Berg also discloses that said scanning (passive monitoring) step includes each of two wireless communication stations 30, 34, 40 (figures 11-13) scanning (passively monitoring) at least some of said plurality of carrier frequency bands (column 2 line 65 - column 3 line 7, column 5 line 21 - column 6 line 2, and column 14 lines 1-8).

Consider **claim 9**, and **as applied to claim 8 above**, Van De Berg further discloses the step of including one of said wireless communication stations 30, 34, 40 communicating with the other of said wireless communication stations 30, 34, 40 regarding results of said scanning (passive monitoring) (figures 11-13, column 5 line 21 - column 6 line 2, and column 14 lines 1-8).

Consider **claim 10**, and **as applied to claim 1 above**, Van De Berg also shows and discloses that said scanning (passive monitoring) step includes scanning (passively monitoring) a plurality (group) of available carrier frequency bands (abstract, figures 2, 4, and 7-9, and column 9 lines 3-21), and inherently tuning a filter (not shown) to each of said plurality (group) of available carrier frequency bands (i.e., in order to process each of the available frequency bands a filter must be tuned to each available frequency band) (column 12 line 40 - column 13 line 5).

Consider **claim 12**, and **as applied to claim 1 above**, Van De Berg further discloses that said selecting step includes the wireless communication station 30, 34, 40 selecting the plurality of carrier frequency bands for the desired radio (wireless) communication and informing another wireless communication station 30, 34, 40 of the selected carrier frequency bands (column 12 line 40 - column 13 line 5 and column 14 lines 1-8).

Consider **claim 13**, Van De Berg further shows and discloses a wireless communication station 30, 34, 40 (figures 11-13) comprising:

an antenna 31, 35 (figures 11-13) for use in wireless communications (column 12 lines 3-7 and column 13 lines 42-48 and 57-62);

a band selection controller (combination of scanning means 52 and central control and application logic 51) (figures 11-13) coupled to said antenna 31, 35 for selecting a frequency band for use in a desired radio (wireless) communication from among a plurality of frequency bands available to be used for the desired radio (wireless) communication (abstract, figures 2 and 4, column 2 line 65 - column 3 line 6, column 3 lines 38-48, column 5 line 52 - column 6 line 2, and column 6 lines 20-40);

said band selection controller (combination of scanning means 52 and central control and application logic 51) (figures 11-13) operable for scanning (passively monitoring) at least one of the available frequency bands to determine whether the at least one frequency band is acceptable for the desired radio (wireless) communication (abstract, figures 2, 4, and 7-9, column 2 line 65 - column 3 line 17, column 3 lines 38-48, column 4 lines 27-39, column 5 line 52 - column 6 line 2, column 6 lines 20-40, column 7 lines 48-65, column 9 lines 4-17, column 12 lines 41-51);

said band selection controller (combination of scanning means 52 and central control and application logic 51) (figures 11-13) operable for selecting a bandwidth of the at least one available frequency bands (e.g., the bandwidth of the at least one available frequency band is selected, if deemed acceptable, to form, by itself or in combination with other acceptable available frequency bands, the at least one frequency band for the desired communication)

(figure 7 and column 9 lines 1-30); and

said band selection controller (combination of scanning means 52 and central control and application logic 51) (figures 11-13) further operable for selecting the at least one frequency band for the desired radio (wireless) communication if the at least one frequency is determined to be acceptable (abstract, figures 2, 4, 7-9, column 3 lines 1-6 and 11-17, column 5 lines 8-12, column 5 line 52 - column 6 line 2, column 9 lines 9-30, and column 12 lines 41-60).

Consider **claim 14**, and **as applied to claim 13 above**, Van De Berg also discloses that said band selection controller (combination of scanning means 52 and central control and application logic 51) (figures 11-13) includes a scanning means 52 (interference monitor) for monitoring interference associated with the at least one frequency band (column 6 lines 30-40 and column 12 lines 40-46).

Consider **claim 15**, and **as applied to claim 14 above**, Van De Berg inherently discloses that said scanning means 52 (interference monitor) must include an RSSI measurement apparatus since it is disclosed that said scanning means 52 (interference monitor) performs signal strength measurements (column 6 lines 33-37).

Consider **claim 16**, and **as applied to claim 13 above**, Van De Berg further shows and discloses a wireless communications interface (transmitter & modulator 44 and receiver & demodulator 45) (figures 11-13) coupled between said antenna 31, 35 and said band selection controller (combination of scanning means 52 and central control and application logic 51) (figures 11-13), said wireless communications interface (transmitter & modulator 44 and receiver & demodulator 45) cooperable with said band selection controller (combination of scanning

means 52 and central control and application logic 51) and said antenna 31, 35 for communicating to another wireless communication station 30, 34, 40 (figures 11-13) information indicative of a result of said scanning (passive monitoring) operation (column 5 line 21 - column 6 line 2, column 6 lines 20-39, column 12 line 41 - column 13 line 5, and column 14 lines 1-8).

Consider **claim 18**, and **as applied to claim 13 above**, Van De Berg inherently teaches that said band selection controller (combination of scanning means 52 and central control and application logic 51) (figures 11-13) includes a filter (not shown) coupled to said antenna 31, 35 for tuning to each of a plurality (group) of available frequency bands (i.e., in order to process each of the available frequency bands a filter must be tuned to each available frequency band) (column 12 line 40 - column 13 line 5), said band selection controller (combination of scanning means 52 and central control and application logic 51) including scanning means 52 (passive monitor) coupled to said filter (inherent as explained above) for scanning (passively monitoring) each of said plurality (group) of available frequency bands (abstract, figures 2, 4, and 7-9, column 9 lines 3-21, and column 12 lines 40-60).

Consider **claim 19**, and **as applied to claim 13 above**, Van De Berg further shows and discloses a wireless communications interface (transmitter & modulator 44, receiver & demodulator 45, and scanning means 52) (figures 11-13) coupled to said antenna 31, 35 for interfacing between said antenna 31, 35 and a communications application (e.g., cordless telephone), said band selection controller (combination of scanning means 52 and central control and application logic 51) (figures 11-13), including scanning means 52 (portion of said wireless communications interface (transmitter & modulator 44, receiver & demodulator 45, and scanning

means 52) (figures 11-13 and column 12 lines 41-60).

Consider **claim 20**, and **as applied to claim 19 above**, Van De Berg inherently teaches that said scanning means 52 (portion of said wireless communications interface) includes a filter (not shown) for tuning to the at least one frequency bands (i.e., in order to process the at least one frequency band a filter must be tuned to the frequency band) (column 12 line 40 - column 13 line 5) and an RSSI measurement apparatus coupled to said filter for providing an RSSI measurement with respect to the at least one frequency band since it is disclosed that said scanning means 52 (portion of said wireless communications interface) performs signal strength measurements (column 6 lines 33-37).

Consider **claim 22**, Van De Berg clearly shows and discloses a method of selecting a frequency band for use in a desired radio (wireless) communication from a among a plurality of frequency bands available to be used for the desired radio (wireless) communication (abstract, figures 2 and 4, column 2 line 65 - column 3 line 6, and column 3 lines 38-48), comprising:

selecting the frequency band and a bandwidth of the frequency band (i.e., the bandwidth of the frequency band (e.g., C_1) is selected to be scan (monitored)) (figures 2 and 7 and column 9 lines 1-30);

scanning (passively monitoring) the frequency band to determine whether the frequency band is acceptable for the desired radio (wireless) communication (abstract, figures 2, 4, and 7-9, column 2 line 65 - column 3 line 17, column 3 lines 38-48, column 4 lines 27-39, column 7 lines 48-65, and column 9 lines 4-17); and

selecting the frequency band for the desired radio (wireless) communication if the

frequency band is determined to be acceptable by said scanning (passive monitoring) (abstract, figures 2, 4, 7-9, column 3 lines 1-6 and 11-17, column 5 lines 8-12, and column 9 lines 9-30).

Consider **claim 24**, and **as applied to claim 22 above**, Van De Berg further shows and discloses that said scanning (passive monitoring) step includes monitoring interference associated with the frequency band (abstract, figure 7 step 3, figure 8 step 13, figure 9 step 24, column 3 lines 1-6 and 11-17, column 9 lines 6-8, column 9 lines 57-62, and column 10 lines 46-50).

Consider **claim 25**, and **as applied to claim 24 above**, Van De Berg also discloses that said scanning (passive monitoring) step includes making an RSSI measurement with respect to the frequency band (column 4 lines 57-64 and column 10 line 66 - column 11 line 3).

Consider **claim 26**, and **as applied to claim 22 above**, Van De Berg further shows and discloses that said scanning (passive monitoring) step includes scanning (passively monitoring) a plurality of carrier (narrow) frequency bands, and combining results of said scanning (passive monitoring) of said carrier (narrow) frequency bands to produce a wide band result corresponding to said at least one frequency band (figure 7 steps 2-6 and column 9 lines 4-30).

Consider **claim 29**, and **as applied to claim 22 above**, Van De Berg also discloses that said scanning (passive monitoring) step includes each of two wireless communication stations 30, 34, 40 (figures 11-13) scanning (passively monitoring) at least some of said plurality of available frequency bands (column 2 line 65 - column 3 line 7, column 5 line 21 - column 6 line 2, and column 14 lines 1-8).

Consider **claim 30**, and **as applied to claim 29 above**, Van De Berg further discloses the

step of including one of said wireless communication stations 30, 34, 40 communicating with the other of said wireless communication stations 30, 34, 40 regarding results of said scanning (passive monitoring) (figures 11-13, column 5 line 21 - column 6 line 2, and column 14 lines 1-8).

Consider **claim 32**, and **as applied to claim 22 above**, Van De Berg further discloses that said scanning (passive monitoring) step includes a wireless communication station 30, 34, 40 scanning (passively monitoring) a plurality (group) of available frequency bands (abstract, figures 2, 4, and 7-9, column 4 lines 27-39, column 6 lines 20-39, column 9 lines 3-21, and column 12 line 41 - column 13 line 5), and said selecting step including the wireless communication station 30, 34, 40 selecting the at least one frequency band for the desired radio (wireless) communication and informing another wireless communication station 30, 34, 40 of the selected frequency band (column 12 line 40 - column 13 line 5 and column 14 lines 1-8).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. **Claims 2, 6, 7, 21, 23, 27, and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Van De Berg (U.S. Patent # 5,907,812)** in view of **well known prior art (MPEP 2144.03)**.

Consider **claims 2 and 23**, and **as applied to claims 1 and 22 above**, Van De Berg clearly shows and discloses the claimed invention except that said scanning (passive monitoring) step includes monitoring communication quality associated with the plurality of carrier frequency bands.

Nonetheless, the Examiner takes Official Notice of the fact that it is notoriously well known in the art to monitor the communication quality associated with a frequency band in order

to determine whether or not said frequency band is acceptable for a desired communication.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Van De Berg to specifically monitor the communication quality of at least one available frequency band in order to determined if said at least one available frequency band is acceptable for a desired communication as known in the prior art. Such feature provides an additional parameter to be used for selecting an available frequency band in Van De Berg's invention in accordance with the desired communication.

Consider **claims 6, 7, 21, 27, and 28**, and **as applied to claims 1, 5, and 13 above**, Van De Berg further discloses that his invention can be applied to several different technologies operating on the same geographical area and using the same frequency band (column 1 lines 57-63). However, Van De Berg does not specifically disclose that the wireless communication station is one of a Bluetooth station and an IEEE 802.11b station (claim 21), that the wide frequency band is an IEEE 802.11b (claims 6 and 27), or that at least one of the frequency bands is a Bluetooth 2.0 band (claims 7 and 28).

Nonetheless, the Examiner takes Official Notice of the fact that it is notoriously well known in the art that IEEE 802.11b and Bluetooth 2.0 are well known standards in which wireless communication stations operate and they operate within the same frequency band (i.e., 2.4 GHz).

Therefore, as suggested by Van De Berg, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to operate the teachings of Van De Berg for a Bluetooth or an IEEE 802.11b station in an IEEE 802.11b frequency band or in a

Bluetooth 2.0 frequency band since these standards operate in the same frequency band as well known in the art and with the teachings of Van De Berg interference can be avoided and management of the frequency band can be efficiently accomplished between the wireless communication stations.

6. **Claims 11 and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Van De Berg (U.S. Patent # 5,907,812)** in view of **West (U.S. Patent # 5,574,979)**.

Consider **claims 11 and 31**, and **as applied to claims 1 and 22 above**, Van De Berg clearly shows and discloses the claimed invention except that the plurality of carrier frequency bands includes a frequency band associated with microwave oven interference.

In the same field of endeavor, West clearly shows and discloses a method for avoiding periodic interference in a wireless communication system in which user supported radio terminals and radio base stations monitor a frequency band for the presence of periodic interference caused by a microwave oven 4501 (figure 45) (i.e., frequency band associated with microwave oven interference) and transmit when interference is absent in said frequency band (figure 45, column 3 line 64 - column 4 line 23, column 5 line 62 - column 6 line 6, and column 61 lines 15-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of West into the method of Van De Berg in order to optimize the selection of the frequency band by monitoring a frequency band associated with microwave oven interference and transmitting in said band during acceptable periods when

interference is not present. Such feature would optimized the communication procedure (West; column 61 lines 15-22).

7. **Claim 17** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Van De Berg (U.S. Patent # 5,907,812)** in view of **Souissi et al. (U.S. Patent # 6,327,300 B1)**.

Consider **claim 17**, and **as applied to claim 13 above**, Van De Berg further shows and discloses a wireless communications interface (transmitter & modulator 44 and receiver & demodulator 45) (figures 11-13) coupled between said antenna 31, 35 and said band selection controller (combination of scanning means 52 and central control and application logic 51) (figures 11-13), said wireless communications interface (transmitter & modulator 44 and receiver & demodulator 45) cooperable with said antenna 31, 35 for receiving and providing to said band selection controller (combination of scanning means 52 and central control and application logic 51) a scanning (passive monitoring) result which is associated with the at least one frequency band and which has been obtained and transmitted by another wireless communication station 30, 34, 40 (column 5 line 21 - column 6 line 2, column 6 lines 20-39, column 12 line 41 - column 13 line 5, and column 14 lines 1-8).

However, Van De Berg fails to specifically disclose that said band selection controller (combination of scanning means 52 and central control and application logic 51) is operable for determining whether the at least one frequency band is acceptable for the desired radio (wireless) communication in response to said result received from said another wireless communication station 30, 34, 40.

In the same field of endeavor, Souissi et al. clearly show and disclose an apparatus for dynamic spectrum allocation in which a transceiver 10 (wireless communication station) (figure 1) includes a processor or controller 12 (band selection controller) that receives a communication request from a second transceiver device (another wireless communication station) on a dynamically selected portion of the spectrum (at least one frequency band) selected (as result of monitoring) by the second transceiver device (another wireless communication device) (figures 1 and 2, column 2 lines 16-22, and column 2 lines 48-60), said processor or controller 12 (band selection controller) determining whether or not said selected portion of the spectrum (at least one frequency band) is acceptable for the desired wireless communication in response to said request received from said second transceiver device (another wireless communication station) (figure 2, column 2 lines 22-35 and 60-65, and column 3 line 20 - column 4 line 3).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection technique taught by Souissi et al. into the wireless communication station of Van De Berg in order to significantly enhanced the dynamic selection of the frequency band to be used in the desired communication by, for example, accounting for unknown interferers to one of the transceiver devices during the selection process (Souissi et al.; column 3 lines 37-44).

Response to Arguments

8. Applicant's arguments, filed on July 19, 2004, with respect to **claims 1, 13, and 22**, on

page 9 last paragraph to page 11 last paragraph of the remarks, have been considered but are moot in view of the new ground(s) of rejection necessitated by the new limitations added to claims 1, 13, and 22. See the above rejection of claims 1, 13, and 22 for the relevant citations found in Van de Berg disclosing the newly added limitations.

9. Applicant's failure to adequately traverse the Examiner's taking of Official Notice in the last Office Action is taken as an admission of the fact noticed (i.e., that is notoriously well known in the art that IEEE 802.11b and Bluetooth 2.0 are well known standards in which wireless communication stations operate and they operate within the same frequency band (i.e., 2.4 GHz)).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any response to this Office Action should be **faxed to** (703) 872-9306 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

220 S. 20th St.
Crystal Plaza Two, Lobby, Room 1B03
Arlington, VA 22202

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rafael Perez-Gutierrez whose telephone number is (703) 308-8996. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700 or call customer service at (703) 306-0377.

Rafael Perez-Gutierrez
R.P.G./rpg **RAFAEL PEREZ-GUTIERREZ**
PATENT EXAMINER
October 30, 2004